CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 77-32

WASTE DISCHARGE REQUIREMENTS FOR:

BAHIA HOMEOWNERS ASSOCIATION
BAHIA LAGOON AND CHANNEL
NOVATO, MARIN COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

1. The Bahia Homeowners Association (hereinafter called the discharger) submitted a report of waste discharge dated August 27, 1976.

2. The Bahia Homeowners Association operates and maintains Bahia Lagoon and Bahia Channel, which are waters of the State adjacent to the Petaluma River. The Association proposes to perform hydraulic maintenance dredging of Bahia Lagoon and Channel on a three year cycle with approximately 80,000 cubic yards removed each cycle. The material will be pumped to a land disposal site of approximately 13 acres as shown on Attachment A of this Order. The land disposal site will provide settling of the sediment-water slurry in a series of ponds prior to discharge of overflow water back to Bahia Lagoon.

3. The lagoon and channel receives stormwater runoff from roads and landscape areas of adjacent housing.

4. The discharger has prepared a Negative Declaration in accordance with the California Environmental Quality Act. The Regional Board has reviewed the project and concurs with the discharger's finding that the project will not have a substantial adverse impact on the environment.

5. The Board, in April 1975, adopted a Water Quality Control Plan for the San Francisco Bay Basin. The Plan contains water quality objectives for the Bahia Lagoon and Channel and the Petaluma River.

6. The beneficial uses of the Bahia Lagoon and Channel and the Petaluma River include:

   a. Recreation
   b. Navigation
   c. Fish migration and habitat
   d. Habitat and resting for waterfowl, migratory birds and certain rare and endangered species
   e. Esthetic enjoyment
   f. Industrial water supply
   g. Commercial fishing and shellfish harvesting

7. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

8. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that the Bahia Homeowners Association, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder shall comply with the following:

A. Dredging Specifications

1. The wastewater overflow as discharged to waters of the State from the land disposal area shall meet the following quality limits at all times:

   a. Settleable matter — 1.0 ml/l-hr, maximum

   b. pH — 6.5 minimum, 8.5 maximum

   c. Dissolved Sulfide — 0.1 mg/l, maximum

2. The dredging or disposal of waste shall not cause:

   a. Floating, suspended, or deposited macroscopic particulate matter or foam in waters of the State at any place more than 100 feet from the dredge or point of discharge of return flow;

   b. Bottom deposits or aquatic growths in waters of the State at any place;

   c. Alteration of apparent color beyond present natural background levels in waters of the State at any place more than 100 feet from the dredge or point of discharge of return flow;

3. The turbidity of the waters of the State at any point beyond 100 feet from the point of discharge of the return flow or from dredging operation to increase above background levels by more than the following:

Receiving Water Background	Incremental Increase
≤50 Units	5 Units, maximum
50-100 Units	10 Units, maximum
≥100 Units	10% of Background, maximum

B. Water Quality Limitations

1. Adequate circulation and mixing, or other methods of water quality management, shall be provided so as to maintain the following levels of water quality at all points within the Bahia Lagoon and Channel:

   a. Dissolved Oxygen — 5.0 mg/l minimum. Annual median - 80% saturation

b. pH — Variation from ambient pH within the adjacent waters of the Petaluma River by no more than 0.5 pH units.

c. Chlorophyll "a" — Increase concentration above levels in the adjacent portion of the Petaluma River of no more than 10 percent.

d. No visible, floating, suspended or deposited oil or other products of petroleum origin.

2. Water quality within Bahia Lagoon and Channel shall be managed so as to prevent the presence of toxic or other deleterious substances in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

3. The application of copper or other conservative toxicants to control growth of algae or aquatic plants within Bahia Lagoon and Channel is prohibited.

C. Provisions

1. The treatment or disposal of wastes shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

2. This Order includes items numbered 1, 4, 5, 7, 8, and 10 of the attached "Standard Provisions," dated November 20, 1974.

3. To ensure compliance with Section B.1, B.2, and B.3 of this Order the discharger shall submit a water quality management plan acceptable to the Executive Officer no later than June 1, 1977.

4. Dredging operations shall cease immediately whenever violations of requirements are detected by the self-monitoring program and operations shall not resume until alternative methods of compliance are provided.

5. The discharger shall comply with all sections of this order immediately upon commencement of dredging operations and overflow.

6. This Board requires the discharger to file technical reports on self-monitoring work performed according to detailed specifications developed pursuant to the Regional Board's Resolution No. 73-16.

7. This Board requires the discharger to file a report on waste discharge at least 120 days before making any material change or proposed change in the character, location, or volume of the discharge.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on April 19, 1977.

Attachments:
Map - A
Standard Provisions 11/20/74
Self-Monitoring Program

FRED H. DIERKER
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

NOVEMBER 20, 1974

STANDARD PROVISIONS

1. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from his liabilities under federal, state, or local laws, nor guarantee the discharger a capacity right in the receiving waters.

2. The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.

3. The discharger shall require any industrial user of the treatment works to comply with applicable service charges and toxic and pretreatment standards promulgated in accordance with Sections 204(b), 307, and 308 of the Federal Water Pollution Control Act or amendments thereto. The discharger shall require each individual user to submit periodic notice (over intervals not to exceed nine months) of progress toward compliance with applicable toxic and pretreatment standards developed pursuant to the Federal Water Pollution Control Act or amendments thereto. The discharger shall forward a copy of such notice to the Board and to the following:

Regional Administrator
U.S. Environmental Protection Agency
100 California Street
San Francisco, CA 94111

4. The discharger shall permit the Regional Board:

(a) Entry upon premises in which an effluent source is located or in which any required records are kept,

(b) Access to copy any records required to be kept under terms and conditions of this Order,

(c) Inspection of monitoring equipment or records, and

(d) Sampling of any discharge.

5. All discharges authorized by this Order shall be consistent with the terms and conditions of this Order. The discharge of any pollutant more frequently than or at a level in excess of that identified and authorized by this Order shall constitute a violation of the terms and conditions of this Order.

6. The discharger shall maintain in good working order and operate efficiently as possible any facility or control system installed by the discharger to achieve compliance with the waste discharge requirements.

Publicly owned facilities only

7. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of at a legal point of disposal, and in accordance with the provisions of Division 7.5 of the California Water Code. For the purpose of this requirement, a legal point of disposal is defined as one for which waste discharge requirements have been prescribed by a regional water quality control Board and which is in full compliance therewith.

8. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:

(a) Violation of any term or condition contained in this Order;

(b) Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts;

(c) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

(d) A change in applicable effluent limitations guidelines as established by the Environmental Protection Agency pursuant to sections 301, 304(b), 306, and 307 of the Federal Water Pollution Control Act, as amended.

9. If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Federal Water Pollution Control Act, or amendments thereto, for a toxic pollutant which is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in this Order, the Board will revise or modify this Order in accordance with such toxic effluent standard or prohibition and so notify the discharger.

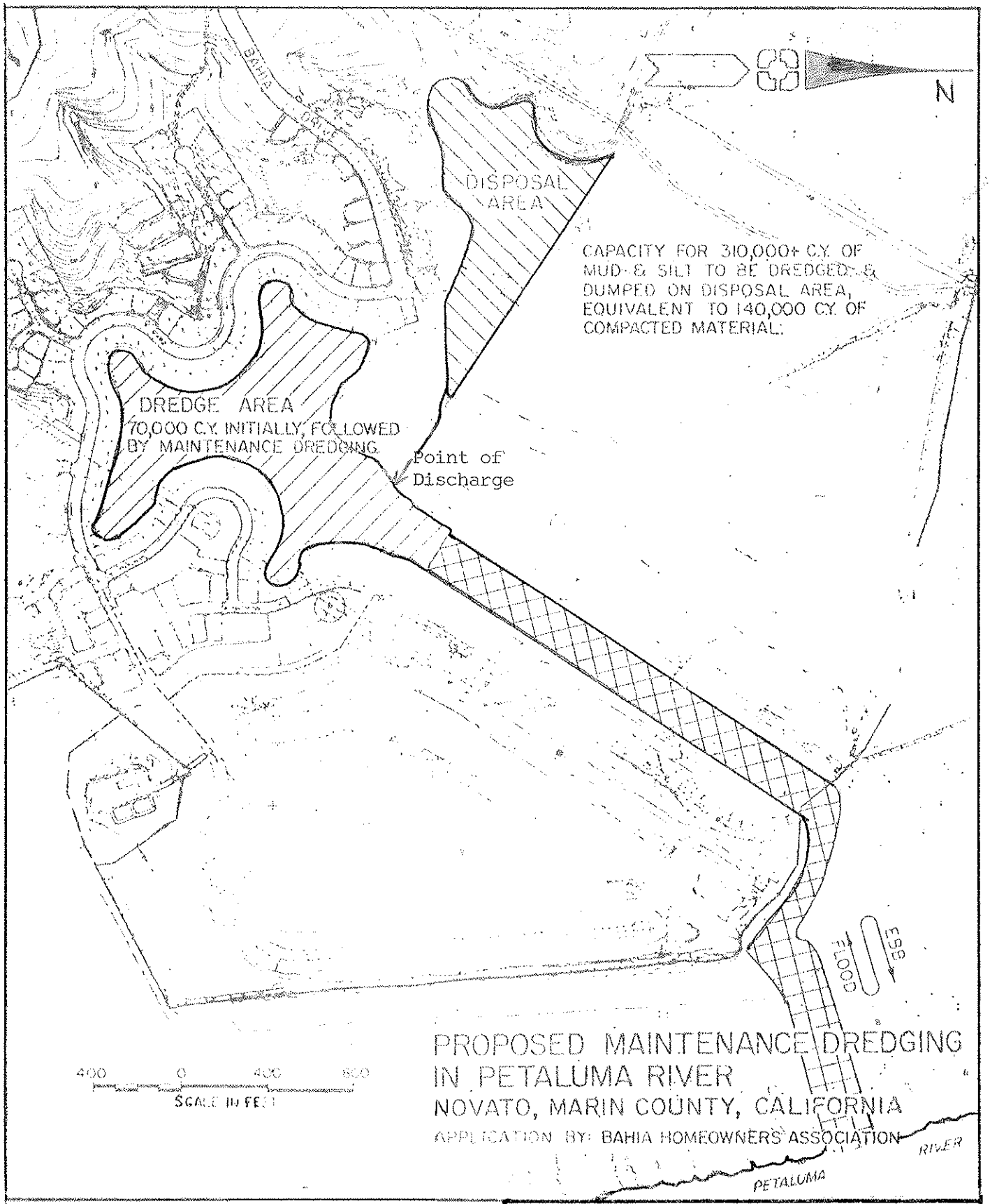
10. In the event the discharger is unable to comply with any of the conditions of this Order due to:

(a) Breakdown of waste treatment equipment;

(b) Accidents caused by human error or negligence; or

(c) Other causes such as acts of nature,

the discharger shall notify the Executive Officer by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to correct the problem and the dates thereof, and what steps are being taken to prevent the problem from recurring.



PROPOSED MAINTENANCE DREDGING IN PETALUMA RIVER
NOVATO, MARIN COUNTY, CALIFORNIA

APPLICATION BY: BAHIA HOMEOWNERS ASSOCIATION

STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ATTACHMENT A ORDER NO. 77-32

WASTE DISCHARGE REQUIREMENTS FOR
BAHIA HOMEOWNERS ASSOCIATION

BAHIA LAGOON AND CHANNEL

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR:

BAHIA HOMEOWNERS ASSOCIATION, BAHIA LAGOON AND CHANNEL
MARIN COUNTY

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a monitoring program by a waste discharger, also referred to as a self-monitoring program, are:

1. To document compliance with waste discharge requirements and prohibitions established by this regional Board;

2. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge;

3. To develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards; and,

4. To prepare water and wastewater quality inventories.

B. DESCRIPTION OF SAMPLING STATIONS AND SCHEDULE OF SAMPLING, ANALYSES AND OBSERVATIONS

I. Effluent - Hydraulic Dredging Operation

Station	Description
E-1	The point of discharge where wastewater overflow will be returned to San Francisco Bay.

Station	Type of Sample and Frequency	Analyses	Units
E-1	Grab sample during the first and last hour of operation each day, daily throughout each maintenance dredging project duration	Settleable Matter	ml/l-hr
		pH	units
		Dissolved Sulfide(1)	mg/l
		Dissolved Oxygen	mg/l

(1)Once daily analysis of Dissolved Sulfide if Dissolved Oxygen is less than 5.0 mg/l.

II. Receiving Water - Overflow Area

Station	Description
C-1-E.1	At a point located within 20 feet downcurrent from the point of discharge from land disposal area.
C-2-E.1	At a point located within the center of the visible wastefield 120 feet downcurrent from the point of discharge from land disposal area.
C-3-E.1	At a point located 200 feet downcurrent from the point of discharge from land disposal area.
C-R-E.1	At a point located 1000 feet downcurrent from the point of discharge from land disposal area.

Receiving Water - Dredge Area

Station	Description
C-1-D	At a point located in the visible wastefield resulting from the dredging activity, and within 20 feet downcurrent from the point of dredging.
C-2-D	At a point located in the visible wastefield resulting from the dredging activity, and approximately 120 feet downcurrent from the dredge.
C-3-D	At a point located in the visible wastefield resulting from the dredging activity and approximately 300 feet downcurrent from the dredge.
C-R-D	At a point located at least 1000 feet upcurrent from the dredge and not in the visible wastefield.
Note: 1.	A sketch of the limit of each visible wastefield shall be part of the map or photograph which includes station locations for each sampling day.

Station	Type of Sample & Frequency	Analyses	Units
All C Stations	Grab samples shall be taken at periods of slack tide when performing dredging operations and collected at least weekly throughout each maintenance dredging project duration	Dissolved Oxygen	mg/l
		Dissolved Sulfide*	mg/l
		Total Sulfide*	mg/l
		Temperature	^{o}C
		pH (electrometric)	units
		Turbidity	JTU
		Apparent Color	color units
		Standard Observations**	

*To be performed if DO $\leq$ 5.0 ppm.

**Standard Observations, including:

a. Floating and suspended materials of waste origin, (to include oil, grease, algae, and other macroscopic particulate matter) presence or absence, source, and size of affected area.

b. Discoloration and turbidity: description of color, source, and size of affected area.

c. Odor: presence or absence, characterization, source, and distance of travel.

d. Time and height of low tides corrected to nearest location for the sampling date and time of sample and collection.

e. Water and sampling depths.

III. Land Observations

Station	Description
L-1 thru L-'n'	Located along the perimeter levee of the land impoundment facility at equidistant intervals not to exceed 400 feet. (A sketch showing the location of these stations will accompany each report.)

Type of Sample and Frequency	Observation and Analyses
Observations, weekly throughout the project duration.	All standard observations as follows:

(1) Determine height of the freeboard at lowest point of dikes confinning liquid wastes.

(2) Evidence of leaching liquid from area of confinement and estimated size of affected area. (Show affected area on a sketch.)

(3) Odor: presence or absence, characterization, source, and distance of travel.

(4) Evidence of low points in dike resulting in overflow of water other than described in Report of Waste Discharge. Low points shall be filled immediately with appropriate fill material.

IV. Lagoon and Channel Water

Station	Description
LG-1	At a point in the Bahia Channel approximately 800 feet from the confluence of the Lagoon with the Petaluma River.

IV. Lagoon and Channel Water (Continued)

Station	Description
LG-2	At a point in the Bahia Channel approximately 2600 feet from the confluence of the Lagoon and the Petaluma River.
LG-3	At a point in the Bahia Lagoon in a northwest leg of the Lagoon.
LG-4	At a point in the Bahia Lagoon in a southeast leg of the Lagoon.

Reference Station

Station	Description
R-1	At a point in the Petaluma River approximately 200 feet upstream from the confluence of the Petaluma River and Bahia Channel.

The schedule of sampling and analysis shall be that given as Table I.

C. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Violations of Requirements

In the event the discharger is unable to comply with the conditions of the waste discharge requirements and prohibitions due to:

(a) Maintenance work, power failure, or breakdown of waste treatment equipment, or

(b) Accidents caused by human error or negligence, or

(c) Other causes, such as acts of nature.

The discharger shall notify the Regional Board Office by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written report shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to prevent the problem from recurring.

2. Self-Monitoring Reports

Written reports shall be filed regularly for each calendar month (unless specified otherwise) by the fifteenth day of the following month. The reports shall be in letter form, and shall specifically cover each point in the Monitoring Program (Part B). Any violations shall be clearly identified, and actions taken or planned for correcting violations shall be included. Monitoring reports shall be signed:

(a) In the case of corporations, by a principal executive officer at least at the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates, or

(b) In the case of a partnership, by a general partner, or

(c) In the case of a sole proprietorship, by the proprietor.

The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge, the report is true and correct.

I, Fred H. Dierker, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedures set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board's Order No. 77-32.

2. Has been ordered by the Executive Officer on April 19, 1977, and becomes effective immediately.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer.

FRED H. DIERKER
Executive Officer

Attachment:
Table I

TABLE I

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSES

SAMPLING STATIONS	LG-1 to LG-4 & R-1								
TYPE OF SAMPLES	G	G	BS						
Date of Sample	Mar 2 Sept30	Oct 1 Mar 1							
Total Coliform (MPN/100 ml)	2W	M							
Chlorophyll "a" (mg/l)	2W	M							
Dissolved Oxygen (mg/l)	2W	M							
Oil & Grease (mg/l)	M	3M	Q						
Fecal Coliform (MPN/100 ml)	2W	M							
Copper (mg/l)			Q						

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
Cont = continuous sampling
BS = bottom sediment sample
O = observation

FREQUENCY OF SAMPLES

E = each occurrence
2W = every 2 weeks
M = monthly
3M = every 3 months
Q = quarterly, once in March, June, Sept., and December